

COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

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DEPARTMENT OF ENVIRONMENTAL QUALITY Blue Ridge Regional Office www.deq.virginia.gov

David K. Paylor Director

Robert J. Weld Regional Director

Roanoke Office 3019 Peters Creek Road Roanoke, Virginia 24019 (540) 562-6700

Fax (540) 562-6725

March 2, 2012

Mr. C. D. Holley Vice Pres. Fossil & Hydro Operations VEPCO/ODEC - Clover Power Station 5000 Dominion Blvd. Glen Allen, VA 23060

Location: Halifax County Registration No.: 30867

Dear Mr. Holley:

Attached is an amended Federal Operating Permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. <u>Please read all conditions carefully.</u>

This approval to operate does not relieve VEPCO/ODEC - Clover Power Station of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director Department of Environmental Quality P. O. Box 1105 Richmond, VA 23218 In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Allen Armistead at 434-582-6202 or the regional office at 434-582-5120.

Sincerely

Robert J. Weld Regional Director

RJW/EAA

Attachments: Permit

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III

Manager/Inspector, Air Compliance



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Federal Operating Permit Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is

hereby granted to:

Permittee Names:

Virginia Electric & Power Co., Old Dominion Electric

Cooperative

Facility Name:

Clover Power Station

Facility Location:

4091 Clover Rd., 2.5 miles north of Clover near Rt. 600 in

Halifax Co., Virginia

DEQ Registration Number:

Permit Number:

30867 BRRO-30867

Effective Date

Expiration Date

January 1, 2008

December 31, 2012

Amended Date March 2, 2012

This permit includes the following programs:

Federally Enforceable Requirement - Clean Air Act (Sections I through XI)

Federally Enforceable Requirement - Title IV Acid Rain (Section XII)

Federally Enforceable Requirement - NO_x Budget Trading (Section XIII)

Federally Enforceable Requirement - Clean Air Interstate Rule (Section XIV)

Robert J. Weld, Regional Director

March 2, 2012 Signature Date

Permit Conditions, 42 pages

Attachments:

Appendix A: Phase II Acid Rain application (4 pages)

CAIR Application (4 pages)

Appendix B: VEPCO 2003 Consent Decree (134 pages)

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I. Facility Information

Permittees

Virginia Electric & Power Company (VEPCO) Old Dominion Electric Cooperative (ODEC)

Responsible Official

Ms. Katheryn B. Curtis Station Director

Acid Rain Designated Representative C. D. Holley Vice President - Fossil & Hydro System Operations USEPA ATS-AAR ID # 2920

NO_x Budget Trading Authorized Account Representative C. D. Holley USEPA AAR ID # 2099

Facility

4091 Clover Rd. Clover, Virginia 24534-0245

Contact Person

Cathy C. Taylor Director, Environmental Services Innsbrook Technical Center 5000 Dominion Boulevard Glen Allen, Virginia 23060 (804) 273-2929

County-Plant Identification Number: 51-083-0046

ORIS Code: 7213

NATS Facility ID Number: 007213000001, 007213000002

Facility Description: NAICS 221112 – The Clover Power Station (Clover) operates two primary pulverized coal fired boilers nominally each rated at 4,085 MMBtu/hr for the purpose of generating electricity. The facility is major for PM, PM₁₀, SO₂, NOx, CO and VOC. Each boiler is equipped with a fabric filter for particulate emissions control, a wet limestone flue gas desulfurization system for SO₂ control and low NO_x burners with overfire air to control NO_x emissions. A SNCR (voluntarily installed) is also included on each primary boiler. The equipment associated with the main boilers includes coal, limestone, lime, ash and fuel storage and handling systems. The startup fuel for the main boilers is No. 2 fuel oil. The facility also has one No. 2 fuel oil-fired auxiliary boiler nominally rated at

Clover Power Station

Permit Number: BRRO-30867

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213.9 MMBtu/hr, which is used to provide steam during main boiler start-up, if needed. As an alternative to using No. 2 fuel oil, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content restrictions. Two emergency generators are available to provide electricity if necessary. An alternative operating scenario is to haul ash and/or FGD by-product directly to a marketer rather than to the landfill.

Clover received a New Source Review permit dated October 7, 2004 (as amended 5/4/05) to construct and operate a synthetic fuel plant ("synfuel"). The major components of the facility include a mixer feed gate, binder spray header, two pug mixers, two briquetters, a collection conveyor, a dust collector system, and binder/mixing tanks.

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II. Emission Units

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
	ng Equipmen	ıt					
ES-1	EP-1	Combustion Engineering	4,085	fabric filter	BH-1	particulates	2/16/12
		pulverized coal-fired boiler	MMBtu/hr	wet limestone FGD	FGD-1	SO ₂	
			(nominally)	low NOx burners w/ overfire air	LNB-1	NOx	1 ·
ES-2	EP-2	Combustion Engineering	4,085	fabric filter	BH-2	particulates	2/16/12
	İ	pulverized coal-fired boiler	MMBtu/hr	wet limestone FGD	FGD-2	SO ₂	
			(nominally)_	low NOx burners w/ overfire air	LNB-2	NOx	1
ES-3	EP-3	Combustion Engineering No. 2 fuel oil fired boiler	213.9 (nominally)				2/16/12
Coal and A	sh Handling		(Hommuny)		<u> </u>		
ES-4 (a-e)	-	Coal handling, storage and crushing	varies	-	-	particulates	2/16/12
ES-4 (f-o)	EP-4 (f-o)	Coal handling, storage and crushing	varies	(10) Johnson March fabric filters	FF-4 (f-o)	particulates	2/16/12
ES-7 (a-c)	EP-7 (a-c)	Fly ash handling	varies	(2) Mikropul and (1) Zurn fabric filters	FF-7 (a-c)	particulates	2/16/12
Lime and I	imestone H	andling					-
ES-5 (a)		Limestone storage and handling	varies	-	-	particulates	2/16/12
ES-5 (b-d)	EP-5 (b-d)	Limestone storage and handling	varies	(5) Johnson March fabric filters	FF-5 (b-d)	particulates	2/16/12
ES-6 (a-b)	EP-6 (a-b)	Lime storage and handling	varies	(3) Johnson Water labric litters	FF-6 (a-b)	particulates	e2/16/12
Emergency	Generators					,	-
IS-1	IP-1	Emergency diesel generators, 2 units	14.66 MM Btu/hr (nominally)	-	-	-	2/16/12

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Emission	Stack ID	Emission Unit Description	Size/Rated	Pollution Control Device (PCD)	PCD ID	Pollutant	Applicable
Unit ID		Emission our Description	Capacity	Description	FCD ID	Controlled	Permit Date
Synfuel Pla	nt						
FG-1		Motorized feed gate	500 ton/hr	PE, WS		particulates	5/4/05
FM-1,FM-2	DCS-1	Pug mixers	500 ton/hr	WS, FF		particulates	5/4/05
BR-1, BR-2	DC3-1	Briquetters (pellet mills)	500 ton/hr	WS, FF		particulates	5/4/05
C-3	DCS-1	Pellet mill transfer conveyor	500 ton/hr	PE, WS, FF	-	particulates	5/4/05
C-4 (a-b)	DC8-1	Pellet mill feed conveyors	250 ton/hr	WS, FF	-	particulates	5/4/05
C-5	<u> </u>	Collection conveyor	500 ton/hr	PE, WS	-	particulates	5/4/05
Coal Trans	fer Equipme	ent .					
SB-I		Surge bin	500 ton/hr	PE, WS	-	particulates	5/4/05
CR-I		Coal crusher	500 ton/hr	FE	-	particulates	5/4/05
C-1 & C-2		Coal feed conveyors	500 ton/hr	PE, WS	-	particulates	5/4/05
CG1–CG3		Coal feed diversion gates	500 ton/hr	PE, WS	-	particulates	5/4/05
Product Tr	ansfer Equi	pment	<u>.</u>			_	
C6-C8		Product conveyors	500 ton/hr	PE, WS	<u>-</u>	particulates	5/4/05
PG-1&PG-2		Product diversion gates	500 ton/hr	PE, WS	-	particulates	5/4/05
RS-1		Radial stacker	500 ton/hr	PE, WS	-	particulates	5/4/05
RH-1		Reclaim hopper	500 ton/hr	PE, WS		particulates	5/4/05
RC-1		Reclaim conveyor	500 ton/hr	PE		particulates	5/4/05
PP		Product stockpile	10,000 ton	PE, WS	<u> </u>	particulates	5/4/05
Binder Equ	ipment					·	 =
PT-1		Polymer tank	25,000 gal	none	-	VOC	5/4/05
PMT-1		Polymer mixing tank	2,000 gal	none		VOC	5/4/05
PT-3		Polymer storage tank	16,000 gal	none	-	VOC	5/4/05
WT-1		Polymer recycle storage tank	5,000 gal	none		VOC	5/4/05
WT-2		Water storage tank	5,000 gal	-			5/4/05
DT-I		Diesel fuel storage tank	1,000 gal	none	-	VOC	5/4/05

III. Fuel Burning Equipment Requirements – (ES1 and ES2)

A. Main (Primary) Boiler Limitations

1. Except where this permit is more restrictive than the applicable requirement, the main boilers shall be operated in compliance with the requirements of 40 CFR 60, Subpart Da.

(9 VAC 5-80-490, 9 VAC 5-50-400 and 9 VAC 5-50-410)

2. Particulate emissions from each main coal boiler shall be controlled by a fabric filter performing at 99.9 % control efficiency. The fabric filters shall be provided with adequate access for inspection. The fabric filters may be bypassed during low sulfur diesel fuel boiler start-ups to alleviate potential moisture damage to the fabric filters at low start-up temperatures. The fabric filters shall operate at all times that coal is being fired in the main boilers except for thirty (30) minutes during each start-up. The fabric filters shall be equipped with a device to continuously measure pressure drop.

(9 VAC 5-80-490, Condition I.4 of 2/16/12 Permit, and 40 CFR 60.42a (a)(2))

- 3. Sulfur dioxide emissions from each main coal boiler shall be controlled by a flue gas desulfurization system having an efficiency of at least 94 % on a 30-day rolling average and achieving a SO₂ emissions rate of 0.10 lb/MMBtu on an annual average. The flue gas desulfurization system shall be operational at all times that coal is being burned in the boiler, including start-up and shut-down. The control systems shall be provided with adequate access for inspection.

 (9 VAC 5-80-490, Condition I.5 of 2/16/12 Permit, 40 CFR 60.43a (a) (1) and 40 CFR 60.43a(g))
- Nitrogen oxide (NO_x) emissions from the primary coal boilers shall be controlled by Pollution Minimum burners and boiler design with advanced over-fire air for low NOx combustion. The NO_x reduction requirement must be at least 65 percent reduction of potential combustion concentration.
 (9 VAC 5-80-490, Condition I.6 of 2/16/12 Permit, and 40 CFR 60.44a(a)(2))
- 5. The approved fuels for the main boilers are bituminous coal and No. 2 fuel oil (see Condition III.A.7). A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-490 and Condition I.28 of 2/16/12 Permit)
- 6. The maximum sulfur content of the coal to be burned in the primary boilers shall not exceed 1.3 % by weight on an annual average and 1.7 % by weight per shipment. "Shipment" is defined for this condition as a continuous, single delivery of fuels or blend of fuels from the same origin. The permittee shall maintain records of all coal shipments received, indicating sulfur content per shipment. The permittee shall obtain an analysis of the coal sulfur content at least once per shipment. Details of the sampling procedure shall be arranged with the Director, Blue Ridge Regional Office. All fuel delivery records and sampling results shall be available on site for inspection by Department of Environmental Quality (Department) personnel and shall be kept current for the most recent five-year period. A summary of the sampling analysis shall be submitted quarterly to the Director, Blue Ridge Regional Office.

 (9 VAC 5-50-410, 9 VAC 5-80-490, and Condition I.29 of 2/16/12 Permit)

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7. The annual average sulfur content of the No. 2 fuel oil to be burned in the main boilers shall not exceed 0.1 % by weight. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content restrictions. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.

(9 VAC 5-50-410, 9 VAC 5-80-490 and Condition I.31 of 2/16/12 Permit)

- 8. Storage tanks for fuel oil shall be equipped with submerged or bottom fill and each shall be equipped with a conservation vent.
 - (9 VAC 5-80-490 and Condition I.17 of 2/16/12 Permit)
- 9. The following restrictions apply to the main boilers during startup and before the main boilers are brought on line:
 - The auxiliary boiler and either of the main boilers shall operate concurrently for a period not to exceed five (5) hours in any 24-hour period.
 - The fabric filters must be placed in service within thirty (30) minutes after coal firing is commenced.
 - The SO₂ absorbers must be on-line prior to coal firing.
 - The fabric filters may not be bypassed when the main boiler is being fired with coal except for a period of thirty (30) minutes or less.

(9 VAC 5-80-490 and Condition I.22b of 2/16/12 Permit)

- 10. The yearly amount of coal to be burned in each boiler shall not exceed 1,431,384 tons, calculated as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-490 and Condition I.15 of 2/16/12 Permit)
- 11. Emissions from the operation of each primary coal boiler shall not exceed the limits specified below:

Criteria Pollutant	lb/MMBtu	<u>lb/hr</u>	ton/yr *
Particulate Matter	0.020	81.7	357.8
PM10	0.018	73.5	322.1
Sulfur Dioxide			1,789 **
•annual_average *	0.10	***	-
•30-day rolling average	0.156	***	<u>-</u>
Nitrogen Oxide			
■30-day rolling average	0.32	N/A	****
Carbon Monoxide	0.10	408.5	1,789.2
Volatile Organic Compounds	0.010	40.9	178.9
Lead	0.00042	1.72	7.5

^{*} All annual emissions limits are based on an annual capacity factor of 100%. Annual emission limits are to be calculated as the sum of each consecutive twelve (12) month period.

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** Based on an SO₂ scrubber removal efficiency of either 95 % applied to an annual average coal sulfur content of 1.3 % by weight or an SO₂ scrubber removal efficiency of at least 94 % applied to an annual average coal sulfur content of 1.0 % or a combination of both.

*** see Condition III.B.2

**** Emissions of NOx from the combined operation of the main coal boilers shall not exceed 10,735.4 tons/year. Annual emission limits are to be calculated as the sum of each consecutive twelve (12) month period.

Toxic pollutant	lb/day
OR Hazardous Air Pollutant	
Beryllium	0.4
Fluoride (as HF)	784.8
Mercury	3.1
Sulfuric Acid Mist	1,471.2

- (9 VAC 5-80-490, Conditions I.18, I.19a and I.19c of 2/16/12 Permit, and 40 CFR Subpart Da))
- 12. The maximum SO₂ emission from the main boilers shall not exceed an average of 1,151 pounds per hour for any 3-hour period nor 1,065 pounds per hour for any 24-hour period.
 - (9 VAC 5-80-490 and Condition I.35 of 2/16/12 Permit)
- 13. Visible emissions from each of the main boiler stacks shall not exceed 10 % opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 % opacity. The opacity standard applies at all times, except during periods of start-up, shutdown or malfunction in accordance with 40 CFR, Subpart Da, Section 60.46a.
 - (9 VAC 5-50-80, 9 VAC 5-80-490 and Condition I.24 of 2/16/12 Permit)
- 14. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
 - (9 VAC 5-80-490)

B. Main Boiler Monitoring

- 1. Continuous emission monitors (CEMS) shall measure and record the following:
 - the opacity at each main boiler fabric filter outlet,
 - the concentration of SO₂ at the inlet and outlet of each flue gas desulfurization system,
 - NO_x at each main boiler stack, and

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• CO₂ or O₂ emitted from each main coal boiler.

The CEMS shall be maintained, located and calibrated with approved procedure in accordance with 40 CFR 60.40b and 40 CFR 60, Subpart Da. A 30-day notification prior to the demonstration of continuous monitoring system performance (and any subsequent notifications) is to be submitted to the Director, Blue Ridge Regional Office.

(9 VAC 5-80-490 and Condition I.32 of 2/16/12 Permit)

- 2. The continuous monitoring data generated by the CEMS on the main boilers shall be used to determine compliance with the emissions and opacity standards. The data capture and reporting requirements of 40 CFR 60, Subpart Da shall apply. The quality assurance provisions of 40 CFR 60 or 40 CFR 75 shall apply. In addition to the requirements of 40 CFR 60, Subpart Da, the permittee shall include the following in the quarterly emissions report:
 - each rolling 3-hour SO₂ emissions rate in excess of 1,151 pounds per hour, based on the averaged sum of emissions from the main coal boilers,
 - each rolling 24-hour SO₂ emissions rate in excess of 1,065 pounds per hour, based on the average sum of emissions from the main coal boilers, and
 - the annual averaged SO₂ and NOx emission rates for each main coal boiler (in lb/MMBtu) taken as the sum of the previous 12 months.

(9 VAC 5-80-490 and Condition I.34 of 2/16/12 Permit)

3. The continuous monitoring data generated by the opacity monitor may be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request. These monitors are subject to such data capture requirements and quality assurance requirements as prescribed by 40 CFR Part 60.

(9 VAC 5-80-490 and Condition I.36 of 2/16/12 Permit)

4. Compliance Assurance Monitoring (CAM) - The permittee shall implement a compliance assurance monitoring (CAM) plan to monitor the fabric filter controlling particulate matter from the primary boilers in accordance with the following table. Each monitor shall be operated according the manufacturer's specifications, unless other methods are approved, and in compliance with 40 CFR 64.3 (b) or (d).

Main Boilers (ES-1, ES-2) Compliance Assurance Monitoring Plan				
I. Indicator Opacity				
A. Measurement Approach	COMS			
II. Indicator Range	Continuous operation between 0% - 10% opacity per hour. An excursion is any six-minute period with average opacity >10%.			

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III. Performance Criteria A. Data Representativeness	COMS monitors the opacity of the gas stream from each boiler's fabric filter	
B. Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to the initial performance tests	
C. QA/QC Practices and Criteria	Zero and span drift are checked daily and filter audits are performed in accordance with PS-1. Filter audits performed annually.	
D. Monitoring Frequency	Measure continuously	
E. Data Collection Procedures	Data are collected by computerized data acquisition and handling system (DAHS). The system collects and retains all relevant opacity data.	
F. Averaging period	Six-minute block averages.	

Changes pertaining to the information in this condition shall not be implemented prior to approval by the DEQ. Changes may require public participation according to the requirements of 9 VAC 5-80-230 or 9 VAC 5-80-590. (9 VAC 5-80-490 and 40 CFR 64.6 (c))

- 5. Compliance Assurance Monitoring (CAM) The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
 - (9 VAC 5-80-490 and 40 CFR 64.6 (c))
- 6. Compliance Assurance Monitoring (CAM) At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - (9 VAC 5-80-490 and 40 CFR 64.7 (b))
- 7. Compliance Assurance Monitoring (CAM) Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the main boilers are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
 - (9 VAC 5-80-490 and 40 CFR 64.7 (c))
- 8. Compliance Assurance Monitoring (CAM) Upon detecting an excursion or exceedance, the permittee shall restore operation of the main boilers (including the control device and associated capture system) to its normal or usual manner of

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operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

(9 VAC 5-80-490 and 40 CFR 64.7 (d)(1))

9. Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(9 VAC 5-80-490 and 40 CFR 64.7(d)(2))

10. Compliance Assurance Monitoring (CAM) - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly (in accordance with Condition XI.E) notify the Director, Blue Ridge Regional Office and submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9 VAC 5-80-490, 40 CFR 64.7(e), and 40 CFR 64.6 (c))

11. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the main boilers for a semiannual reporting period (as established in Condition XI.C.3), or as otherwise required by the DEQ in accordance with review conducted under 40 CFR 64.7(d)(2), the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection at the permitted facility

(9 VAC 5-80-490 and 40 CFR 64.8(a) and (b))

12. Compliance Assurance Monitoring (CAM) - Monitoring imposed under 40 CFR Part 64 shall not excuse the permittee from complying with any existing requirements under federal, state, or local law, or any other applicable requirement under the Act, as described in 40 CFR 64.10.

(9 VAC 5-80-490 and 40 CFR 64.10)

13. Compliance Assurance Monitoring (CAM) - The permittee shall submit CAM reports as part of the facility's existing quarterly or semiannual excess emissions reports

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required under this permit to the Director, Blue Ridge Regional Office. Such reports shall include at a minimum:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-490 and 40 CFR 64.9(a))

C. Main Boiler Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The volume of fuel oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
 - e. The sulfur content of the oil, and
 - f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.

(9 VAC 5-80-490)

- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The monthly and annual throughput of No. 2 fuel oil (in 1000 gallons) or "low sulfur diesel fuel" for each of the main boilers. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.

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b. The monthly and annual throughput of coal (in tons) for each of the main boilers. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.

- c. All fuel supplier certifications. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
- d. All CEMs records as required by Condition III.B.2.

These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years. (9 VAC 5-50-50 and 9 VAC 5-80-490)

- 3. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the Department.
 (9 VAC 5-80-490)
- 4. Compliance Assurance Monitoring (CAM) Recordkeeping The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9 VAC 5-80-490 and 40 CFR 64.9(b))

D. Main Boiler Testing

At a frequency not to exceed once every five years, the permittee shall conduct a stack test for PM and PM-10 from each main boiler to demonstrate compliance with the applicable hourly and lb/MMBtu emission limits contained in this permit. The initial test shall be performed within 180 days after the effective date of this permit. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-40-30 or 9 VAC 5-50-30 as applicable. The details of the tests shall be arranged with the Director, Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Blue Ridge Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-490, 9 VAC 5-40-30, and 9 VAC 5-50-30)

E. Main Boiler Reporting

The permittee shall submit fuel quality reports to the Director, Blue Ridge Regional Office, within 30 days after the end of each calendar quarter. If no shipments of fuel oil were received during the calendar quarter, the quarterly report shall consist of the dates

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included in the calendar quarter and a statement that no oil was received during the calendar quarter. If fuel oil was received during the calendar quarter, the reports shall include:

- 1. The dates included in the quarterly or semi-annual period;
- 2. A copy of all fuel supplier certifications for all shipments of No. 2 fuel oil and of "low sulfur diesel fuel" received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition III.C.1 for each shipment of No. 2 fuel oil. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit;
- 3. All CEMs reporting requirements as required in Condition III.B.2; and
- 4. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the No. 2 fuel oil and/or "low sulfur diesel fuel" burned or received at the facility.

(9 VAC 5-50-50 and 9 VAC 5-80-490)

- 5. Compliance Assurance Monitoring (CAM) Reporting The permittee shall submit CAM reports as part of the existing quarterly or semiannual reports to the Director, Blue Ridge Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken:
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-490 and 40 CFR 64.9(a))

IV. Auxiliary Boiler Requirements – (ES-3)

A. Auxiliary Boiler Limitations

- 1. Except where this permit is more restrictive than the applicable requirement, the auxiliary boiler shall be operated in compliance with the requirements of 40 CFR 60, Subpart Db.
 - (9 VAC 5-80-490, 9 VAC 5-50-400 and 9 VAC 5-50-410)
- 2. Emissions from the auxiliary boiler shall be controlled by the use of No. 2 fuel oil (0.1 % sulfur by weight) and by good combustion operating practices. As an alternative to this requirement, the permittee may use fuel supplier certifications of

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"low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit. A change in the fuel may require a permit to modify and operate.

- (9 VAC 5-50-410, 9 VAC 5-80-490, Condition I.7 and Conditions I.30 and I.31 of 2/16/12 Permit)
- The auxiliary boiler shall consume no more than 165.8 x 10⁹ Btu of No. 2 fuel oil per year, calculated as the sum of each consecutive twelve (12) month period.
 (9 VAC 5-80-490 and Condition I.16 of 2/16/12 Permit)
- 4. Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below:

PM	0.03 lb/10 ⁶ Btu	6.4 lb/hr	2.4 ton/yr
PM10	0.03 lb/10 ⁶ Btu	6.4 lb/hr	2.4 ton/yr
Sulfur Dioxide	0.11 lb/10 ⁶ Btu	23.5 lb/hr	9.1 ton/yr
Nitrogen Oxides (as NO ₂)	0.20 lb/10 ⁶ Btu	42.8 lb/hr	16.5 ton/yr
СО	0.16 lb/10 ⁶ Btu	34.2 lb/hr	13.2 ton/yr
Volatile Organic Compounds	0.012 lb/10 ⁶ Btu	2.6 lb/hr	1.0 ton/yr

SO₂ based on 0.1 % sulfur (by weight) fuel.

- (9 VAC 5-80-490, 9 VAC 5-50-260, and Condition I.20 of 2/16/12 Permit)
- 5. Visible Emissions from the auxiliary boiler stack shall not exceed 10 % opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 % opacity. The opacity standard applies at all times, except during periods of start-up, shutdown or malfunction in accordance with 40 CFR, Subpart Db, Section 60.43 b (g).
 - (9 VAC 5-50-80, 9 VAC 5-80-490, and Condition I.24 of 2/16/12 Permit)
- 6. The auxiliary boiler shall not be operated when one or both of the main coal boilers are on line. "On line" is defined for this condition as the point at which steam generated by the boilers is supplied to the steam turbine for purpose of generating electrical power.
 - (9 VAC 5-80-490 and Condition I.22a of 2/16/12 Permit)

B. Auxiliary Boiler Monitoring

1. CEMS shall be installed on the auxiliary boiler in accordance with the applicable New Source Performance Standard at 40 CFR 60, Subpart Db. They shall be maintained and calibrated in accordance with 40 CFR 60.13. A 30-day notification prior to the demonstration of continuous monitoring system performance and

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subsequent notifications are to be submitted to the Director, Blue Ridge Regional Office.

- (9 VAC 5-80-490 and Condition I.33 of 2/16/12 Permit)
- 2. The continuous monitoring data generated by the CEMS on the boiler shall be used to determine compliance with the emissions and opacity standards. All of the data capture, quality assurance provisions, and reporting requirements of 40 CFR 60, Subpart Db shall apply.
 - (9 VAC 5-80-490 and Condition I.36 of 2/16/12 Permit)

C. Auxiliary Boiler Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The volume of fuel oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
 - e. The sulfur content of the oil, and
 - f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
 - (9 VAC 5-50-410 and 9 VAC 5-80-490)
- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The daily and annual throughput of No. 2 fuel oil (in 1000 gallons) for the auxiliary boiler. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
 - b. All fuel supplier certifications. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.
 - c. All CEMs records as required by Condition IV.B.2.

These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-490)

D. Auxiliary Boiler Testing

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The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-490)

E. Auxiliary Boiler Reporting

- 1. The permittee shall submit fuel quality reports to the Director, Blue Ridge Regional Office, within 30 days after the end of each calendar quarter. If no shipments of fuel oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If fuel oil was received during the calendar quarter, the reports shall include: If no shipments of fuel oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If fuel oil was received during the semi-annual period, the reports shall include:
 - a. The dates included in the semi-annual period
 - b. A copy of all fuel supplier certifications for all shipments of No. 2 fuel oil or "low sulfur diesel fuel" received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition IV.C.1. for each shipment of No. 2 fuel oil. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit;
 - c. All CEMs reporting requirements as required in Condition IV.B.2; and
 - d. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the No. 2 fuel oil and/or "low sulfur diesel fuel" burned or received at the facility.

(9 VAC 5-50-50 and 9 VAC 5-80-490)

V. Coal and Ash Handling, Limestone and Lime Handling Equipment Requirements – (ES-4 (a-0) and ES-7 (a-c), ES-5 (a-d) and ES-6 (a-b))

A. Limitations

- Fugitive dust emissions from coal unloading, feeding and conveying shall be controlled as necessary to comply with opacity limits as stated in Condition V.A.7.
 Railcars unloading coal shall be housed in an open-ended shelter. Unloading of coal to the storage piles shall be via a radial stacker.
 - (9 VAC 5-80-490 and Condition I.9 of 2/16/12 Permit)
- 2. The coal crusher and pulverizers shall be totally enclosed to prevent fugitive dust emissions.
 - (9 VAC 5-80-490 and Condition I.10 of 2/16/12 Permit)

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3. All loaded conveyor belts located outside of buildings shall be enclosed with weather tight covers or Department-approved alternatives including three-quarter covers and all returns equipped with a scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material. Return conveyor belts shall be enclosed on one side with wind guards.

(9 VAC 5-80-490 and Condition I.11 of 2/16/12 Permit)

- Fugitive dust emissions from the fly ash shall be controlled by mixing with water or wet flue gas desulfurization by-product. Fly ash may be handled dry into fully enclosed trucks.
 - (9 VAC 5-80-490 and Condition I.12 of 2/16/12 Permit)
- 5. Reserve coal stockpiles will be treated with a crusting agent on a frequency as approved by the Department to minimize emissions during storage. Both working and reserve coal stockpiles will employ wet suppression during pile loading and unloading as necessary to minimize emissions.
 - (9 VAC 5-80-490 and Condition I.13 of 2/16/12 Permit)
- 6. Visible emissions from all baghouse sources identified in Condition V.A.8 shall not exceed 5% opacity.
 - (9 VAC 5-50-80, 9 VAC 5-80-490, Condition 25 of 2/16/12 Permit, 40 CFR 60.252(c) and 40 CFR 60.672)
- Visible emissions from the coal handling and lime handling processes identified in Condition V.A.9 shall not exceed 10% opacity.
 (9 VAC 5-50-80, 9 VAC 5-80-490, Condition I.25 of 2/16/12 Permit, 40 CFR 60.252(c) and 40 CFR 60.672)
- 8. Particulate emissions from the following materials handling operations will be controlled by fabric filter dust collectors:

Coal Handling (ES-4 (f-n)):

- Coal Track Hopper (includes Coal hopper feeder to Conv. #1, Conv. #1, Conv. #1 transfer to Conv. #2, and Conv. #2)
- Crusher House (includes Conv. #2 transfer to boom Conv. #5, Conv. #8a and #8b transfer to crusher, Coal crushing, Coal crush feed to Conv. #9a, Boom (#5) Conv., and Conv. #9a and #9b together)
- Unit #1 Coal Silo Bin Vent (Conv. #3 transfer to coal silo #1)
- Coal Yard Reclaim Area (Coal Yard reclaim hopper feed to Conv #7a and #7b, and #8a and #8b, transfer to Conv. #8a and #8b together)
- Conveyor #3 Discharge (Conv. #3 transfer to Conv. #4, Conv. #4)
- Unit #1 Plant Silo Area (Conv. #9a and #9b transfer to Conv. # 10a and #10b, Conv. # 9a and #9b transfer to Conv #11a and #11b, Conv. #10a and #10b, Conv. #11a and 11b, Conv. #10a and #10b transfer to plant coal silo)
- Unit #2 Coal Silo Bin Vent (Conv. #4 transfer to coal silo #2)
- Coal Silo Reclaim Area (Coal silo #1 and #2 feed to Conv. #7a and #7b)
- Unit #2 Plant Silo Area (Conv. #11a and #11b transfer to plant coal silo)

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Limestone Handling (ES-5 (b-d)):

- Limestone Track Hopper (Limestone hopper feed to Conv. #1, Conv. #1, Conv. #1 transfer to Conv. #2, Conv. #2)
- Limestone Reclaim Hopper (Reclaim feed transfer to Conv. #3, Conv. #3)
- Limestone Silo Area (Conv. #3 transfer to 1st silo, Conv. #3 transfer to Conv. #4, Conv. #4, Conv. #4 transfer to 2nd silo, Conv. #4 transfer to Conv. #5, Conv. #5 transfer to 3rd silo)

Lime Handling (ES-6 (a-b)):

- Lime Track Hopper (Lime track hopper unloading)
- Bulk Lime Silo (Lime silo bin vent)

Fly Ash Handling (ES-7 (a-c)):

- Unit #1 Fly Ash Silo (Fly ash transfer to ash silo #1a)
- Pug Mill/Shuttle Conveyor (Wet dust collector; Transfer from Pug Mills #1a and #2a Shuttle Conveyors)
- Unit #2 Fly Ash Silo (Fly ash silo transfer to ash silo #2a)

The fabric filters shall be provided with adequate access for inspection. (9 VAC 5-80-490, 9 VAC 5-50-260, and Condition I.21a of 2/16/12 Permit)

- 9. Particulate emissions from the coal handling (ES-4 (a-e) includes radial pile equipment traffic, Radial Stacker (Conveyor #6), rail car unloading to hopper, boom transfer to radial stacker, and radial stacker transfer to radial pile) and limestone handling (ES-5 (a) includes limestone conveyor transfer to storage pile) operations will be controlled by equipment design, operating practice, and, where appropriate, wet suppression as necessary.
 - (9 VAC 5-80-490, 9 VAC 5-50-260, and Condition I.21b of 2/16/12 Permit)
- 10. Except where this permit is more restrictive than the applicable requirement, coal handling and processing equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y, "Standards of Performance for Coal Preparation Plants".
 - (9 VAC 5-80-490, 9 VAC 5-50-400 and 9 VAC 5-50-410)
- 11. Except where this permit is more restrictive than the applicable requirement, limestone handling and processing equipment shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.
 - (9 VAC 5-80-490, 9 VAC 5-50-400 and 9 VAC 5-50-410)

B. Coal and Ash Handling Equipment Monitoring and Recordkeeping

Visual emission observations from the fabric filter exhaust stacks shall be conducted at least once per week. If visible emissions are observed, the permittee shall:

a. Take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or

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b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed five (5) % opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed five (5) %, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 5 % or less.

Records shall be maintained, stating the date and time of each visible emissions check and whether visible emissions were observed, results of all VEEs, the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years. (9 VAC 5-50-20)

C. Coal and Ash Handling Equipment Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-490)

VI. Emergency Generators – (IS-1)

A. Emergency Generators Limitations

- 1. Emissions from the emergency generators shall be controlled by the use of No. 2 fuel oil (0.1 % sulfur by weight) and by good combustion operating practices. As an alternative to this requirement, the permittee may use fuel supplier certifications of "low sulfur diesel fuel" containing no greater than 0.05% sulfur to demonstrate compliance with the annual fuel sulfur content. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit. The emergency generators shall be provided with adequate access for inspection. A change in the fuels may require a permit to modify and operate.

 (9 VAC 5-50-410, 9 VAC 5-80-490 and Conditions I.8, I.30 and I.31 of 2/16/12 Permit)
- Each emergency generator shall not operate more than 60 hours per year for maintenance and testing. During this time, each generator shall be operated at either a loaded condition with no more than one of the two main boilers in operation or a no-load condition with one or two main boilers in operation.
 (9 VAC 5-80-490 and Condition I.23 of 2/16/12 Permit)
- 3. Visible emissions from the emergency generators shall not exceed 10% opacity. (9 VAC 5-50-80, 9 VAC 5-80-490, and Condition I.25 of 2/16/12 Permit)

B. Emergency Generators Monitoring and Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier,

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- b. The date on which the oil was received,
- c. The volume of fuel oil delivered in the shipment,
- d. A statement that the oil complies with the American Society for Testing and Materials specifications for No. 2 fuel oil,
- e. The sulfur content of the oil, and
- f. Fuel supplier certifications of "low sulfur diesel fuel", if applicable. A receipt specifying low sulfur diesel fuel may be considered a certification for purposes of this permit.

(9 VAC 5-50-410 and 9 VAC 5-80-490)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Blue Ridge Regional Office. These records shall include, but are not limited to: the hours of operation of each emergency generator. These records shall be available on site for inspection by the Department and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-490)

C. Emergency Generators Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-490)

VII. Synthetic Fuel Plant

A. Limitations

- 1. Particulate emissions from the Synfuel Plant shall be controlled by a fabric filter or full enclosure with wet suppression, or equivalent.
 - (9 VAC 5-80-490 and Condition 3 of 5/4/05 Permit)
- 2. Particulate emissions from the crusher shall be controlled by full enclosure and wet suppression or fabric filter, or equivalent.
 - (9 VAC 5-80-490 and Condition 4 of 5/4/05 Permit)
- Particulate emissions from the conveyor transfers shall be controlled by partial
 enclosure, wet suppression or equivalent. The wet suppression system shall be
 provided with adequate access for inspection and shall be in operation when the
 conveyors are operating.
 - (9 VAC 5-80-490 and Condition 5 of 5/4/05 Permit)
- 4. Fugitive emissions controls specific to synfuel operations shall include the following or equivalent, as a minimum:
 - a. Dust from material handling, transfers, radial stackers, load-outs, and traffic areas, shall be controlled by wet suppression or equivalent (as approved by DEQ).

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- b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
- c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods as approved by DEQ.

(9 VAC 5-80-490 and Condition 6 of 5/4/05 Permit)

- 5. The throughput of coal shall not exceed 3,000,000 tons per year, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-490 and Condition 8 of 5/4/05 Permit.)
- 6. The throughput of latex binder shall not exceed 2,055,000 gallons per year, calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-490 and Condition 9 of 5/4/05 Permit)
- 7. Emissions from the operation of the coal and product transfer equipment and coal crushing shall not exceed the limits specified below:

PM	4.5 lb/hr	13.5 ton/yr(9 VAC 5-50-260)
PM-10	1.2 lb/hr	3.7 ton/yr(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number VII.A.5. (9 VAC 5-80-490, and Condition 10 of 5/4/05 Permit)

8. Emissions from the operation of the Synfuel Plant shall not exceed the limits specified below:

PM	0.01 gr/dscf	5.1 ton/yr	(9 VAC 5-50-260)
PM-10	0.01 gr/dscf	1.1 ton/yr	(9 VAC 5-50-260)
Volatile Organic Compounds	2.9 lb/hr	8.6 ton/yr	(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers VII.A.5, VII.A.6, and VII.C.

(9 VAC 5-80-490 and Condition 11 of 5/4/05 Permit)

9. Visible Emissions specific to synfuel operations from crushing, stockpiles, surge bins, conveyor transfers, and fugitive emissions sources shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

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(9 VAC 5-50-80, 9 VAC 5-80-490, and Condition 12 of 5/4/05 Permit)

- 10. Visible Emissions from any Synfuel Plant stack shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
 (9 VAC 5-50-80, 9 VAC 5-80-490, and Condition 13 of 5/4/05 Permit)
- 11. Visible Fugitive Emissions from the Synfuel Plant enclosure shall have not visible fugitive emission as determined by EPA Method 22 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-50-80, 9 VAC 5-80-490, and Condition 14 of 5/4/05 Permit)

12. Except where this permit is more restrictive than the applicable requirement, the coal crusher (CR-1) shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.

(9 VAC 5-80-490 and Condition 15 of 5/4/05)

B. Monitoring

- 1. The fabric filter as used to comply with the Synfuel Plant and crusher emissions shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum the manufacturer's written requirement or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
 - (9 VAC 5-80-490 and Condition 7 of 5/4/05 Permit)
- 2. Visual emission observations from the Synfuel Plant fabric filter exhaust stack (DCS-1) shall be conducted at least once per week. If visible emissions are observed, the permittee shall:
 - a. Take timely corrective action such that the fabric filter resumes normal operation and there are no visible emissions from the fabric filter exhaust stack, or
 - b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter do not exceed five percent opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed five percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of five percent or less.
 - c. Record all VEE observations stating the date and time of each visible emissions check and whether any visible emission is observed; results of all VEEs; the observer's name and any required corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions.

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C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of coal, calculated monthly as the sum of each consecutive twelve 12-month period.
- b. Annual consumption of latex binder, calculated monthly as the sum of each consecutive 12-month period.
- c. Material Safety Data Sheets (MSDS) or other vendor information showing VOC content for each hinder.
- d. Monthly and annual emissions to verify compliance with the Synfuel Plant's VOC emission limitation. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
- e. Scheduled and unscheduled maintenance and operator training as required by Condition VII.C.2.
- f. Results of all Visible Emission Evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-50-50, 9 VAC 5-80-490, and Condition 17 of 5/4/05 Permit)

- 2. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-490 and Condition 25 of 5/4/05 Permit)

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D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30, 9 VAC 5-80-490, and Condition 18 of 5/4/05 Permit)

VIII. Facility Wide Conditions

A. Limitations

- 1. Fugitive emissions from all external or frequently traveled facility access roads shall be controlled by paving. Fugitive emissions from all paved facility roads shall be controlled through frequent sweeping or roadway washing. Emissions from unpaved roads shall be controlled by wetting as necessary. If operating mechanical sweepers, water shall be used to suppress dust during sweeper operation.
 - (9 VAC 5-170-160, 9 VAC 5-80-490, and Condition I.14 of 2/16/12 Permit)
- 2. Except as specified otherwise in this permit, visible emissions from all emission points shall not exceed 10% opacity.
 - (9 VAC 5-170-160, 9 VAC 5-80-490, and Condition I.25 of 2/16/12 Permit)
- 3. The facility shall be operated in accordance with all applicable requirements of Virginia's NOx SIP Call (9 VAC Chapter 140). A current copy of the regulation has been attached.
 - (9 VAC 5-170-160, 9 VAC 5-80-490, and 9 VAC Chapter 140)

IX. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-2	"A" and "B" #2 fuel oil storage tanks	9 VAC 5-80-720 B	VOC	
IS-3	#2 fuel oil storage tanks, 2 units	9 VAC 5-80-720 B	, VOC	
IS-4	Lube oil/used oil/hydraulic oil systems	9 VAC 5-80-720 B	VOC	
IS-5	Mobile equipment gasoline storage tank	9 VAC 5-80-720 B	VOC	,
IS-6	Two kerosene tanks	9 VAC 5-80-720 B	VOC	
IS-7	Two oil/water separators	9 VAC 5-80-720 B	VOC	
IS-8	Degreaser (non-halogenated)	9 VAC 5-80-720 B	VOC	
IS-9	Antifreeze usage on coal conveyors	9 VAC 5-80-720 B	VOC	
IS-10	Roadway fugitive emissions	9 VAC 5-80-720 B	PM/PM10	-
IS-11	Mobile equipment diesel storage tank	9 VAC 5-80-720 B	VOC	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-490 C, E, and F.

X. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None identified		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

XI. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-800-510.
- 3. No source shall operate after the time that it is required to submit a timely and

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complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.

- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F1 and F5 (ii) of section 9 VAC 5-80-430 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-490 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
 (9 VAC 5-80-490 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

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a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. The status of compliance with the terms and conditions of this permit for the certification period.
- 7. Such other facts as the permit may require to determine the compliance status of the source.

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One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029

(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XI.C.3 of this permit.

(9 VAC 5-80-490 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Blue Ridge Regional Office. (9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination,

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revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-490 G and L)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-490 G.5)

L. Duty to Submit Information

- The permittee shall furnish to the Board, within a reasonable time, any information
 that the Board may request in writing to determine whether cause exists for
 modifying, revoking and reissuing, or terminating the permit or to determine
 compliance with the permit. Upon request, the permittee shall also furnish to the
 Board copies of records required to be kept by the permit and, for information
 claimed to be confidential, the permittee shall furnish such records to the Board along
 with a claim of confidentiality.
 (9 VAC 5-80-490 G.6)
- Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G and 9 VAC 5-80-430 G.9.
 (9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without

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taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 3. (9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

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3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-510 G)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another or from one piece of equipment to another.

(9 VAC 5-80-520)

- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560. (9 VAC 5-80-520)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.

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(9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F. 2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-490 G & L and 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect

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information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-490 A)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-490 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110 and 9 VAC 5-80-490, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 and 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490 I)

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XII. Title IV Requirements

A. Statutory and Regulatory Authorities

In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).

B. SO₂ Allowance Allocations and NO_x Requirements for affected units (9 VAC 5-80-490 A.4)

		2008	2009	2010	2011	2012
Unit 1	SO ₂ allowances, under Table 2, 40 CFR Part 73. (tons)	2,937 ¹	2,937 1	2,943 1	2,943 ¹	2,943 1
	NOx limit	Department compliance through cale this unit's at determined the applicab 0.40 lb/MM If the permit CFR Part 76 the permitter rate specifie the averagin will replace 76.6 or 76.7 the DEQ, the each year, denot exceed t	of Environment plan for United and ar year 20 mual average in accordance le emission library of heat in the submits at (76.11(b)(1) e shall not exist a plan. The at the applicable in the unit's a etermined in the applicable he applicable	76, the Common ental Quality a 1, effective fo 12. Under the NO _x emission with 40 CFR mitation under the put for tangen and the DEQ ceed the annual ging plan for tangen purpoved average emission limit approved and tannual average accordance with emission limits and the tangen approved and tannual average accordance with emission limits and the tangen accordance with t	pproves a star calendar year NO _x compliant rate for each Part 75, shall and CFR 76. Table to the complete the later rescent to the la	ndard NO _x ar 2008 noce plan, year, not exceed 7(a)(1), of bilers. nce with 40 plan, then 0 _x emission ecified in ission rate in 40 CFR binded by on rate for rt 75, shall 0 CFR
		In addition to the described compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO _x compliance plan an requirements covering excess emissions.				

See Sub section C.2

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		2008	2009	2010	2011	2012	
Unit 2	SO ₂ allowances, under Table 2, 40 CFR Part 73. (tons)	2,937 1	2,937 1	2,943 1	2,943 1	2,943 1	
	NOx limit	Pursuant to 40 CFR Part 76, the Commonwealth of Virginia Department of Environmental Quality approves a standard NO _x compliance plan for Unit 2, effective for calendar year 2008 through calendar year 2012. Under the NO _x compliance plan, this unit's annual average NO _x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu of heat input for tangentially fired boilers. If the permittee submits an averaging plan in accordance with 40 CFR Part 76 (76.11(b)(1)) and the DEQ approves the plan, then the permittee shall not exceed the annual average NOx emission rate specified in the averaging plan for those units specified in the averaging plan. The approved averaging plan emission rate will replace the applicable emission limitation listed in 40 CFR 76.6 or 76.7. If a plan is approved and then later rescinded by the DEQ, then the unit's annual average NO _x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu of heat input for tangentially fired boilers.					
	·						
	In addition to the described compliance plan, this unit comply with all other applicable requirements of 40 C 76, including the duty to reapply for a NO _x compliance requirements covering excess emissions.					CFR Part	

See Sub section C.2

C. Additional Requirements, Notes, Comments, and Justifications

1. Additional Requirements

Dominion Generation shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 and includes a complete NOx compliance plan in accordance with 40 CFR §76.9(c) at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used. (9 VAC 5-80-430 C.5)

2. Notes

SO2 allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of this unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of this unit remain obligated to hold sufficient allowances to account for SO2 emissions from this unit in accordance with 40 CFR 72.9(c)(1).

(9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

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XIII. NO_x Budget Trading Program Requirements

A. NO_x Budget Permit General Conditions

1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO_x Budget Unit and falls subject to the NO_x Budget emission limitations under 9 VAC 5-140-40 As required by 9 VAC 5-140-200 A, each NO_x Budget source is required to have a federally enforceable permit. This section of the document represents the NO_x Budget permit.

(9 VAC 5-140-40)

2. The NO_x Budget permit will be administrated by the VADEQ under the authority of 9 VAC 5-80-360 et seq., and 9 VAC 5-140-10 et seq.

(9 VAC 5-140-200 A)

3. The following air emission units have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NO_x Budget Trading program as "opt-in" air emission sources.

(9 VAC 5-140-40 A)

Table XIII – 1 Facility NOx Budget Units							
Facility Unit ID	Unit NATS Code	Unit Name/Description	Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)			
ES-1	007213000001	Combustion Engineering, pulverized coal-fired boiler (tangentially fired)	4,085	424			
ES-2	007213000002	Combustion Engineering, pulverized coal-fired boiler (tangentially fired)	4,085	424			

4. This NO_x Budget permit became effective May 31, 2004.

B. Standard Requirements

- 1. Continuous Monitoring requirements
 - a. The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of 9 VAC 5-140-700 et seq.
- The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (Subparts H of 40 CFR 75 and 40 CFR 97) shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under Conditions XI.B.2.a. through XI.B.2.h.

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3. Nitrogen oxides requirements

a. The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the control period from the unit, as determined in accordance with Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status, of a NO_x Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870.

(9 VAC 5-140-60 C.1)

b. Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of the Clean Air Act, and applicable Virginia Air Pollution Control law.

(9 VAC 5-140-60 C.2)

c. A NO_x Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004.

(9 VAC 5-140-60 C.3)

d. NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with 9 VAC 5-140-400 et. seq., 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et. seq., and 9 VAC 5-140-800 et seq.

(9 VAC 5-140-60 C.4)

e. A NO_x allowance shall not be deducted in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NO_x allowance was allocated.

(9 VAC 5-140-60 C.5)

f. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.

(9 VAC 5-140-60 C.6)

g. A NO_x allowance allocated by the permitting authority or the administrator under the NO_x Budget Trading Program does not constitute a property right.

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(9 VAC 5-140-60 C.7)

h. Upon recordation by the administrator under 9 VAC 5-140-500 et seq., 9 VAC 5-140-600 et seq., or 9 VAC 5-140-800 et seq., every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x Budget permit of the NO_x Budget unit by operation of law without any further review.

(9 VAC 5-140-60 C.8)

4. Excess emissions requirements

- a. The owners and operators of a NO_x Budget unit that has excess emissions in any control period shall:
 - (1) Surrender the NO_x allowances required for deduction under 9 VAC 5-140-540 D 1; and
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

(9 VAC 5-140-60 D)

C. Recordkeeping and Reporting Requirements

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall have accessible for inspection each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

(9 VAC 5-140-60 E.1)

a. The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative.

(9 VAC 5-140-60 E.1)

b. All emissions monitoring information, in accordance with 9 VAC 5-140-700 et seq. of this part; provided that to the extent that 9 VAC 5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply. (9 VAC 5-140-60 E.1)

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- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.
 (9 VAC 5-140-60 E.1)
- d. Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
 (9 VAC 5-140-60 E.1)
- 2. The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under 9 VAC 5-140-300 et seq., 9 VAC 5-140-700 et seq., or 9 VAC 5-140-800 et seq. (9 VAC 5-140-60 E.2)

D. Emission Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-140-710)

E. Liability

- Any person who knowingly violates any requirement or prohibition of the NO_x
 Budget Trading Program, a NO_x Budget permit, or an exemption under 9 VAC 5140-50 shall be subject to enforcement pursuant to applicable State or Federal law.
 (9 VAC 5-140-60 F.1)
- Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law. (9 VAC 5-140-60 F.2)
- No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.
 (9 VAC 5-140-60 F.3)
- 4. Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.

(9 VAC 5-140-60 F.4)

5. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.

(9 VAC 5-140-60 F.5)

6. Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements

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applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NOx authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(9 VAC 5-140-60 F.6)

F. Effect on Other Authorities

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOx authorized account representative of a NOx Budget source or NOx Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

(9 VAC 5-140-60 G)

XIV. Clean Air Interstate Rule (CAIR) Requirement

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., 9 VAC 5-140-5010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is attached to this document and expires upon expiration of this Article 3 permit.

(9 VAC 5-80-110, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

XV. VEPCO Consent Decree Requirements (ES-1 and ES-2)

The Consent Decree entered by the United States District Court for the Eastern District of Virginia, Civil Action Nos. 03-CV-517-A and 03-CV-603-A, on October 3, 2003 between Virginia Electric and Power Company and the United States of America, et al. (the "Consent Decree"), as such Consent Decree might be amended or modified from time to time in accordance with its terms, is incorporated in its entirety into this permit by reference and is attached as Appendix B to this permit. The permittee's obligations under this permit shall be to comply with the terms and conditions of the Consent Decree that relate to the operation of Clover Power Station exclusively, and such compliance shall be determined exclusively by reference to the terms and conditions of the Decree. Whenever any conflict or ambiguity arises between the Consent Decree and this permit, the terms and conditions of the Consent Decree control. Compliance with the monitoring, recordkeeping, reporting, testing and compliance certification requirements in the Consent Decree that relate to the operation of Clover Power Station shall be deemed to satisfy the monitoring, recordkeeping, reporting, testing, and compliance certification requirements of this permit arising out of the terms and conditions of the Consent Decree.

(9 VAC 5-80-490)

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A. Main Boiler Limitations

1. Sulfur dioxide emissions from each main coal boiler shall meet the SO₂ emission rate of 0.13 lb/MMBtu on a 30-day rolling average basis.

(9 VAC 5-80-490 and Paragraph 66 of 10/03/2003 VEPCO Consent Decree)

- 2. The permittee shall use best efforts to operate each FGD at all times the Unit the FGD serves is in operation, provided that such FGD system can be operated consistent with manufacturers' specifications, good engineering practices, and permittee's operational and maintenance needs.
 - (9 VAC 5-80-490 and Paragraph 69 of 10/03/2003 VEPCO Consent Decree)
- 3. The facility shall operate Clover Units ES-1 and ES-2 baghouses to maximize PM emission reductions through the procedures established in this Paragraph:
 - a. Commence operation no later than two hours after commencement of combustion of any amount of coal.
 - b. Continuously operate Clover Units 1 and 2 baghouses in compliance with manufacturers' specifications, the operational design of the Unit, and good engineering.
 - (9 VAC 5-80-490 and Paragraph 78 of 10/03/2003 VEPCO Consent Decree)
- 4. The permittee shall conduct Baghouse Optimization Studies per Paragraph 79 of the Decree by April 21, 2006.
 - (9 VAC 5-80-490 and Paragraph 79 of 10/03/2003 VEPCO Consent Decree)
- 5. Within 270 days after approval of the Baghouse Optimization Studies by the United States, the permittee shall operate and maintain the baghouses in compliance with the approved Baghouse optimization plan.
 - (9 VAC 5-80-490 and Paragraph 80 of 10/03/2003 Consent Decree)
- 6. By December 31, 2009, the permittee shall install, calibrate, operate, and maintain PM CEMS on Units I and 2. Each PM CEM shall be comprised of a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert results to units of lb/MMBtu. The permittee shall select any type of PM CEMS that meets the requirements of this Consent Decree. The permittee shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/MMBtu. During Unit startups, permittee shall begin operating the PM CEMS in accordance with the standards set out in Paragraph 78(A), and the permittee shall thereafter use reasonable efforts to keep each PM CEM running and producing data whenever any Unit served by the PM CEM is operating. The permittee shall submit to EPA for review and approval a plan to install, calibrate and operate each PM CEM. The permittee shall thereafter operate each PM CEM in accordance with the approved plan.
 - (9 VAC 5-80-490 and Paragraphs 85, 92 of 10/03/2003 Consent Decree)
- 7. Data from the PM CEMS shall be used by the permittee, at minimum, to monitor progress in reducing PM emissions. Nothing in the Consent Decree is intended to or shall alter or waive any applicable law (including, but not limited to, any defense,

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entitlements, challenges, or clarifications related to the Credible Evidence Rule in 62 Fed. Reg. 8314 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act, generated either by the reference methods specified herein or otherwise.

(9 VAC 5-80-490 and Paragraph 94 of 10/03/2003 Consent Decree)

B. Main Boiler Monitoring

- 1. By December 31, 2009, the permittee shall continuously monitor PM emissions for each unit by installing PM CEMS in accordance with paragraph 85 of the Decree (Appendix B).
 - (9 VAC 5-80-490 and Paragraphs 81, 85 of 10/03/2003 VEPCO Consent Decree)
- 2. Conduct the 30-day rolling average SO₂ emission rate as lb/MMBtu in accordance with 40 CFR Part 75 for each unit.
 - (9 VAC 5-80-490, 40 CFR 75, and Paragraph 70 of 10/03/2003 VEPCO Consent Decree)

C. Main Boiler Testing

Commencing in 2004, the permittee shall conduct a stack test for PM on each boiler stack. The stack test shall be conducted at least once per every four successive "QA Operating Quarters" (as defined in 40 CFR 72.2) until installation and operation of PM CEMS. (9 VAC 5-80-490, 40 CFR 72.2, and Paragraph 95 of 10/03/2003 VEPCO Consent Decree)

D. Main Boiler Reporting

- 1. The permittee shall report results of the PM stack tests in Condition XV.C, annually until installation and operation of PM CEMS according to "Appendix B-Reporting Requirements".
 - (9 VAC 5-80-490 and Appendix B of 10/03/2003 VEPCO Consent Decree)
- 2. The permittee shall report results of the SO₂ 30-day rolling average in Condition XV.B.2, according to "Appendix B-Reporting Requirements".
 - (9 VAC 5-80-490 and Appendix B of 10/03/2003 VEPCO Consent Decree)
- 3. The permittee shall report results of PM CEMS in Condition XV.B.1, according to "Appendix B-Reporting Requirements".
 - (9 VAC 5-80-490 and Appendix B of 10/03/2003 VEPCO Consent Decree)

APPENDIX A

APPENDIX B

("Vepco Consent Decree_final" submitted as pdf)